WHAT IS CLAIMED IS:

1. An improved method of triangulation comprising the steps of:

providing an addressable matrix array type TV camera capable of scanning individual pixels or groups of pixels;

providing an image on said array indicative of a location of at least one illuminated zone on an object to be measured;

scanning a limited number of pixels of said matrix array to determine image data relating to said zone, without scanning a complete scan line; and

from said data determining dimension or location of an object.

2. A method according to claim 1 wherein said zone is provided by a laser.

3. A method according to claim 1 wherein the choice of pixel data of said array to be scanned is based on knowledge of image data taken on a previous scan.

4. A method according to claim 1 wherein the choice of pixel data of said array to be scanned is based on knowledge of image data taken on a previous object.

5. A method according to claim 1 wherein the pixel data of said array is acquired at higher resolution than previous data.

6. A method according to claim 5 wherein higher A-D resolution is used.

7. A method according to claim 5 wherein higher pixel density resolution is used.

8. A method according to claim 1 including the further step of controlling the illumination energy of said zone using said image data.

9. A method according to claim 1 including the further step of controlling the integration time of said pixels using said image data.

10. A method according to claim 1 wherein the choice of pixel data of said array to be scanned is based on knowledge of image data at another location in said image.

11. An improved triangulation sensor for measuring location or dimension of an object, comprising:

an addressable matrix array type TV camera capable of scanning individual pixels or groups of pixels;

a light source means for illuminating at least one point on an object;

lens means to provide an image on said array indicative of a location of at least one illuminated zone on an object to be measured;

means for scanning a limited number of pixels of said matrix array to determine image data relating to said zone, without scanning a complete scan line; and

means for analyzing said data to determine location or dimension of said object.

12. Apparatus according to claim 11 wherein said light source is a laser.

13. Apparatus according to claim 11 wherein the choice of pixel data of said array to be scanned is based on knowledge of image data taken on a previous scan.

14. Apparatus according to claim 11 wherein the choice of pixel data of said array to be scanned is based on knowledge of image data taken on a previous object.

15. Apparatus according to claim 11 wherein the pixel data of said array is acquired at higher resolution than previous data.

16. Apparatus according to claim 15 wherein higher A-D resolution is used.

17. Apparatus according to claim 15 wherein higher pixel density resolution is used.

18. Apparatus according to claim 11 including the further step of controlling the illumination energy of said zone using said image data.

19. Apparatus according to claim 11 including the further step of controlling the integration time of said pixels using said image data.

20. Apparatus according to claim 11 wherein the choice of pixel data of said array to be scanned is based on knowledge of image data at another location in said image.

21. An improved method of triangulation sensor operation comprising the steps of:

providing an addressable matrix array type TV camera capable of scanning individual rows or columns;

providing an image on said matrix array indicative of a location of at least one zone projected on an object to be measured;

scanning a first plurality of rows or columns of said array to determine first image data, said plurality being less than the total number of rows or columns;

using said first image data, scanning a second plurality of rows or columns of said array to determine second image data, said plurality being less than the total number of rows or columns, to determine from said image data the location of a second point of interest; and,

from said second image data, determining range to an object at said at least one position on said object.

22. A method according to claim 21 wherein said second image data relates to data from a different position on said object than said first image data.

23. A method according to claim 22 wherein said second image data relates to data from a different object than said first image data.

24. A method according to claim 23 wherein said second image data is acquired at higher resolution than said first image data.

25. A method according to claim 24 wherein said second image data resolution is improved in density of pixels.

26. A method according to claim 25 wherein said second image data resolution is improved in analog to digital conversion of pixels.

27. A method according to claim 26 wherein one or more individual pixels in a column or row are addressed, without interrogating a complete row or column.